

MEMO TO: City Council

FROM: Rosemarie Ives, Mayor

DATE: July 19, 2005

SUBJECT: **APPROVAL OF SUPPLEMENTAL CONSULTANT AGREEMENT NO. 2  
FOR ENGINEERING SERVICES, UPPER IDYLWOOD CREEK  
REHABILITATION, PROJECT NO. 02-NR-18/100372**

**I. RECOMMENDED ACTION**

Move to approve and authorize the Mayor to sign supplemental consultant agreement No. 2 with R.W. Beck, Inc. for engineering construction services related to Upper Idylwood Creek Rehabilitation, Project No. 02-NR-18/100372, in an amount not to exceed \$57,500 including contingencies.

**II. DEPARTMENT CONTACT PERSONS**

David Rhodes, Director of Public Works	556-2705
Bill Campbell, City Engineer/Assistant Director of Public Works	556-2733
Ron Grant, Construction Division Manager	556-2742
Jon Spangler, Natural Resources Division Manager	556-2823
Tom Barry, Natural Resources Engineering Section Manager	556-2870
Jerallyn Roetemeyer, Natural Resources Project Manager	556-2824
Phil Day, Construction Project Manager	556-2860

**III. DESCRIPTION**

Upper Idylwood Creek flows through a steep ravine bordered by single family residences on both sides. Most of the basin was developed prior to stormwater regulations that require detention and water quality treatment. As a result, increased flows in Idylwood Creek have caused erosion of the channel bottom and banks. Erosion leads to bank failure and carries more phosphorus laden sediment into lower Idylwood Creek and Lake Sammamish, degrading water quality and adversely impacting rearing and spawning habitat of migrating salmon and resident trout. In addition to the impacts on the natural environment, erosion could threaten the

foundations of decks on homes perched at the top of the slopes at several locations along the steep banks of the channel.

As part of a basin-wide water quality effort, the City constructed a \$3,300,000 bypass pipeline in 2002, to divert excessive storm flows thereby reducing erosion in the channel and the amount of sediment entering Lake Sammamish. The bypass pipeline project included improvements for fish passage under West Lake Sammamish Parkway, and rehabilitation of 800 feet of stream channel through Idylwood Beach Park.

The purpose of this current project is to prevent further channel incision and undercutting of stream banks and to repair the remaining 1,700 feet of Class 3 stream while protecting and improving habitat for fish and wildlife. The project is located upon approximately 24 private properties, south of West Lake Sammamish Parkway between NE 36<sup>th</sup> Street and NE 28<sup>th</sup> Street (see attached vicinity map). Staff have worked with private property owners to obtain easements, construction assess, and to develop design concepts.

Project goals and objectives are as follows:

- Reduce the transport of high-phosphorus sediments to the lower reaches of Idylwood Creek.
- Improve stability of side slopes by preventing future channel incision and undercutting of stream banks.
- Protect and improve habitat for fish and wildlife.
- Improve the stream buffers by controlling invasive vegetation and planting native vegetation.

These goals will be accomplished by stabilizing the banks and streambed using a combination of bioengineering techniques, including installation of boulders, large woody debris, and log and rock weirs. New riparian vegetation will help to improve the stability of the side slopes. Habitat will be improved with the inclusion of in-stream structures to create pools and refuge areas. Riparian planting and removal of non-native, invasive species in the upland buffer will provide additional habitat for birds and insects.

This stream enhancement project is included in the approved 2001-07 Stormwater CIP. It is also an identified project funded from the stormwater water surcharge approved by Council in late 1999.

On July 5, 2005, City Council awarded the construction contract to BCI Contracting, Inc. of Portland, Oregon. Construction is scheduled to begin before the end of July.

This supplemental consultant agreement provides construction assistance from R.W. Beck to provide expertise in the stream habitat feature installation, construction material submittal review, geotechnical monitoring, and permit compliance. R.W. Beck, Inc. was previously selected to provide design studies, preliminary plans, permitting coordination, and community coordination and outreach. The original agreement was executed for preliminary design. Supplemental Agreement No. 1 provided for final design plans, construction documents, and a monitoring plan.

The project will be monitored for five years as required by permit agencies. In addition, the native plants will be maintained and invasive vegetation controlled for the same time period. This maintenance and monitoring is not included in this contract agreement.

The attached supplemental consultant agreement (Attachment B) is a standard City agreement. It will be reviewed by the City Attorney and Risk Manager prior to signature by the Mayor.

#### IV. IMPACT

- A. Service/Delivery: This project will reduce erosion, and improve water quality and slope stability while enhancing habitat for fish and other wildlife.

- B. Fiscal:

Project Costs

Engineering Design	\$324,000
Easements	23,500
City Administration	80,000
Maintenance and Monitoring	20,000
Construction	717,000
Engineering and Construction Services	57,500
<b>Total</b>	<b>\$1,222,000</b>

Project Funding

Stormwater CIP	\$856,000
Private Development Contribution	36,000
Pollution Control Revolving Loan Fund*	330,000
<b>Total</b>	<b>\$1,222,000</b>

\*On August 7, 2001, Council authorized entering into a loan agreement with Washington State Department of Ecology for a Washington State Water

Pollution Control Revolving Fund loan in the amount of \$330,000. This loan will be used to leverage the costs of construction.

**V. ALTERNATIVES**

Council could choose not to approve this agreement. However, this alternative could affect the project goals and quality or could result in additional costs for claims from the contractor.

Council could direct staff to reduce the scope of work for the construction services. This alternative could affect the project goals and quality, could result in additional to costs for claims from the contractor, and would delay design, planning, and management of other approved capital improvement projects.

**VI. TIME CONSTRAINTS**

Agreement Approval	July 2005
Construction Period	July to December, 2005

Note that US Army Corps of Engineers and the Washington Department of Fish and Wildlife have determined that all in-water construction must be completed between July 15 and October 1.

**VII. LIST OF ATTACHMENTS**

- A. Vicinity Map
- B. Consultant Agreement

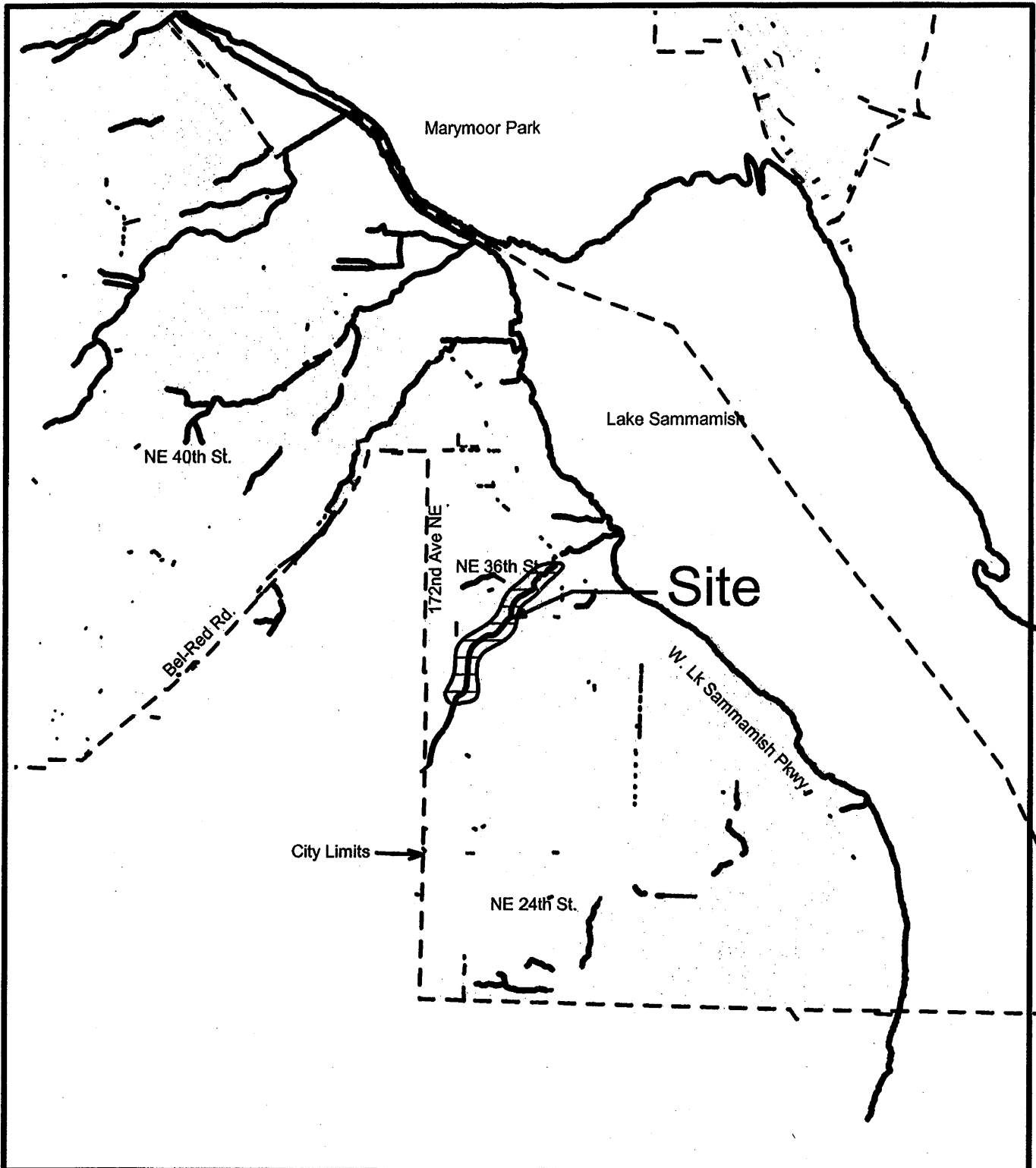
William J. Campbell for  
David Rhodes, Director of Public Works

7/8/05  
Date

Approved for Council Agenda s/s  
Rosemarie Ives, Mayor

7/8/05  
Date

# ATTACHMENT A



## Attachment 1 Vicinity Map



**Upper Idylwood Creek Rehabilitation  
Project No. 100372**

**SUPPLEMENTAL AGREEMENT NO. 2**

This SUPPLEMENTAL AGREEMENT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2005, between the City of Redmond, Washington, hereinafter called the CITY, and R.W. Beck, Inc., hereinafter called the CONSULTANT, amends an earlier Agreement (AGREEMENT) dated May 13, 2003.

WHEREAS the CITY requires additional engineering services related to the above mentioned project, and pursuant to Section XIV (Extra Work) of the AGREEMENT;

NOW THEREFORE, it is mutually agreed that the terms, stipulations, and conditions of the original AGREEMENT shall be binding upon the parties hereto except insofar as amended by this SUPPLEMENTAL AGREEMENT as follows:

**ITEM NO. 1: SCOPE OF WORK**

Section II, SCOPE OF WORK of the AGREEMENT shall be amended by the additional tasks summarized in Exhibit A-2 attached hereto.

**ITEM NO. 2: PAYMENT**

Section V, PAYMENT, shall be supplemented to compensate the CONSULTANT for the items of extra work provided in connection with the work described in Exhibit A-2 attached hereto.

A breakdown of the CONSULTANT'S cost proposal is attached hereto as Exhibit B-2. By this reference the exhibit is made a part of this SUPPLEMENTAL AGREEMENT.

The "Maximum Amount Payable" involved on page 1 of the AGREEMENT is hereby modified to \$389,500.

Summarized below are the costs as listed in the original AGREEMENT and as modified by this SUPPLEMENTAL AGREEMENT.

Summary				
Description	Original Agreement	Supplement No. 1	Supplement No. 2	Total
Labor Cost	\$149,530	\$101,353	\$31,759	\$282,642
Reimbursables	\$3,487	\$45,464	\$20,579	\$69,530
Total	\$153,017	\$146,817	\$52,338	\$352,172
Contingency	\$14,983	\$17,183	\$5,162	\$37,328
<b>Grand Total</b>	<b>\$168,000</b>	<b>\$164,000</b>	<b>\$57,500</b>	<b>\$389,500</b>

**ITEM NO. 3: COMPLETION DATE**

The completion date on page 1 of the AGREEMENT shall be modified to February 28, 2006.

**EXECUTION**

IN WITNESS WHEREOF, the parties have executed this SUPPLEMENTAL AGREEMENT by having their representatives affix their signatures below.

*R.W. Beck Inc.*

CITY OF REDMOND

By \_\_\_\_\_

By \_\_\_\_\_  
ROSEMARIE IVES, Mayor

\_\_\_\_\_  
(Title)

Attested:

By \_\_\_\_\_  
City Clerk

Approved as to Form:

By \_\_\_\_\_  
City Attorney

## **EXHIBIT A-2**

### **SCOPE OF WORK FOR SUPPLEMENTAL SERVICES**

#### **Upper Idylwood Creek Rehabilitation (City of Redmond Project #100379)**

#### **Phase 3 Construction Assistance July 8, 2005**

### **I. Introduction/Background Information**

The City of Redmond has funded the restoration of Upper Idylwood Creek in an effort to reduce erosion, improve water quality, improve slope stability, and improve habitat within the project reach. Construction is scheduled to begin in July of 2005.

The City of Redmond wishes to retain the services of R. W. Beck Inc to provide review of shop drawings, change order preparation, technical recommendations, on-site observations and other construction services. R.W. Beck (RWB) will be assisted by David Evans and Associates in the area of landscaping, by Zipper Zeman Associates (ZZA) in the area of geotechnical engineering, and by Taylor Associates in the area of fish resources and ecology.

### **II. Scope of Work**

The CONSULTANT shall perform all services and provide all goods to accomplish the work as identified below:

#### **Task 1: Project Management and Consultant Coordination**

This task includes administration of the contract between R. W. Beck, Inc. and the City in order to facilitate efficient progress and timely completion. The Consultant will inform the City of any schedule and budget revisions necessary to complete the work.

Work under this task includes:

- Management/coordination of personnel, schedule, and budget.
- Preparation of monthly invoices and brief status reports outlining the work completed during the previous month, project status, and an outline of issues to be resolved.
- Coordination with the City through written, electronic and verbal communication
- Develop work plan.
- Contract and subconsultant administration.

**Assumptions:** Work will be completed within five months of being given notice to proceed.



## **Task 2: Interpretation of Contract Drawings**

The Consultant will provide written and verbal interpretation of the contract documents and other information to support City staff.

## **Task 3: Submittal Review**

City will select civil/structural and landscaping submittals to be reviewed by the Consultant under this task. It is assumed that there will be approximately 4 separate submittal packages to be reviewed by the Consultant including one re-submittal for 25% of the packages. This task also includes review of five Requests for Information (RFI) from the Contractor.

## **Task 4 On-Site Observation**

This task consists of site visits performed as necessary to provide field recommendations regarding construction of stream restoration elements at the request of the City. A site visit memoranda will be prepared to document observations and recommendations.

### **Subtask 4.1 Civil and structural**

The on-site observation for civil and structural will consist of the following:

- Preconstruction Meeting (attended by Beck and David Evans and Associates):
- Construction Progress Meetings: Assumes Consultant will attend up to ten (10) meetings.
- Provide on-site representation to assist the City's Project Manager and Construction crews.
- Determine, in general, if work has been completed in accordance with the intent of the design.
- Assistance in preparing preliminary and final checklist for the completed construction of punch list.

### **Subtask 4.2 Landscaping**

Work associated with landscape construction observation includes 2 to 5 visits for:

- Observation of plant material delivered to the site for genus, species, variety, size and condition.
- Observation of plant layout staking.
- Observation of soil amendments and final grading.

### **Subtask 4.3 Fish Habitat**

Work associated with fish habitat construction observation includes 2 to 5 visits for:

- Assistance in evaluation of in-stream structures and stream bed material.

## **Task 5 Field Engineering for Habitat Structure Placement/Installation**

This task includes providing field engineering and ecological services during construction, primarily associated with the location, placement, and installation of stream habitat improvements (rootwads, banklogs, weir logs, and boulders). The work will include

- staking habitat features using a color code system and working with contractor for proper placement. As excavation of the stream will occur in different reaches, it is envisioned that multiple trips will be required.
- A memorandum will be prepared describing the habitat placement/installation in fulfillment of the HPA and submitted to WDFW

## **Task 6 Fish Removal and Relocation**

### **SubTask 6.1 Obtain Scientific Collector's Permit**

A scientific collector's permit will be obtained from the WDFW to remove all aquatic vertebrates from any dewatered reaches. The area for dewatering is assumed to be West Lake Sammamish Parkway to the bypass structure in 172<sup>nd</sup> Ave NE and NE 28<sup>th</sup> Street.

### **SubTask 6.2 Fish Removal and Relocation**

Fish removal from the dewatered reach of Idylwood Creek will be coordinated with the contractor. This will include all logistical preparation of field gear required. It is assumed one day will also be required for aquatic vertebrate removal. The process will follow the steps described in the WDFW Scientific Collector's Permit. This process will also include preparing a summary report to WDFW, as required in the permit, of the fish collected and their disposition. A draft copy of the summary report will be provided to the City for review and comment prior to submittal to WDFW.

## **Task 7 Geotechnical Evaluation**

### **Subtask 7.1 In-ravine Observation and evaluation**

Work associated with geotechnical services includes 5 to 10 visits for observation and evaluation of construction impacts to steep slopes.

### **Subtask 7.2: Post Construction Field Coordination and Reconnaissance**

This task includes a geotechnical evaluation of four properties located at the top of the ravine. The evaluation involves determining the condition of the properties after construction to reduce the City's exposure to claims as a result of grading activity, construction-related vibration, or other aspects of construction in an area that has a history of slope instability.

The four residential properties to be investigated are summarized below:

- Sundene property at 17404 N.E. 33<sup>rd</sup> Street
- Grady property at 3211 – 174<sup>th</sup> Avenue N.E
- Myers property at 3214 – 173<sup>rd</sup> Avenue N.E.
- Rowell property at 17321 N.E. 31<sup>st</sup> Court

A pre-construction investigation was completed in the spring of 2005. For each of the residential properties, we completed a visual reconnaissance on and above the ravine sideslopes was completed to document the condition of structures on each property in order to identify evidence of instability or other site problems that could be exacerbated by construction activity in the channel. Consultant will coordinate with City staff and the

property owners in order to develop a schedule for the site visits. It is assumed that the City will obtain permission from property owners to access inside the dwellings in order to document evidence of settlement.

#### **Subtask 7.3 Surveying**

A postconstruction survey of the specific features of the four properties such as building corners, decks, etc will be conducted with survey equipment to document the changes from the baseline conditions previously surveyed. No property line surveying will be needed.

#### **Subtask 7.0 Geotechnical Memorandum**

Consultant will prepare a draft memorandum to document observations and survey information from post construction reconnaissance. A final memorandum will be prepared after review and comment by City staff.

### **Task 8 Change Order Preparation and Review**

Consultant will provide assistance to the City associated with requests for change orders. This includes preparation of change orders as well as review of changes orders prepared by the City or contractor.

### **Task 9 Preparation of Record Drawings**

The consultant will take the contractor information and develop record drawings. The As-Built plan will reflect final site topography, the installed planting scheme, and the locations of habitat features. These will be done in Autocadd and converted for use in Microstation.

### **Additional Services**

A contingency allowance for additional services has been included but will not be used without prior written authorization from the City.

Additional Services may include:

- Services in excess of the budget estimate, e.g., review of submittals in excess of those designated above
- Site visits in addition to those designated above
- Field surveying services
- Material testing services
- Evaluation of formal claims by the Contractor (or City) and assistance as requested during dispute resolution process, if necessary.
- Certain post construction services, e.g. monitoring of in stream work, assistance with resolution of warranty issues/items or technical support with contractor or equipment venders)
- Coordination with regulatory agencies

## **III. Assumptions**

1. The budget for Construction Services is an estimate of the involvement by the Consultant to support construction administration by the City. This involvement can vary depending on the construction conditions, construction schedule, availability of City inspectors and other factors. If

a higher level of involvement is necessary and requested by the City, such additional involvement will be considered as extra work.

2. The Consultant will not control or be responsible for Contractor's means, methods, techniques, schedules, sequences or procedures, or for construction safety or any other related programs, or for another's failure to complete the work in accordance with the plans & specifications.

#### **IV. Items and Services to be furnished by the City**

CITY will provide the following items and services to Consultant that will facilitate the work within the limits of the project.

- The City will conduct timely reviews of all work at mutually agreed upon times and consolidation of all review comments onto one review set prior to return to the Consultant.
- The City will obtain all rights-of-entry upon all lands necessary for the performance of the work.
- The City will provide the arrangements for meetings, including meeting place and announcements, etc.
- Construction administration including the maintenance of field construction records necessary to document the receipt of materials, daily construction activities, material testing results, construction progress, meeting summaries, field revisions, and other activities as needed.
- Overall inspection and approval.
- Submittal coordination.
- Managing project schedule.
- Coordination with City Staff and other on-site personnel.
- Coordination with property owners.
- Preparation and administration of progress payment requests submitted by the Contractor.
- Coordination and scheduling of material testing.
- Preparation of meeting minutes.
- Agency coordination and environmental compliance.
- Preparation of Change Order documentation.
- Final acceptance.
- Review and acceptance of contractor's as-built drawings.

## Exhibit B-2

### Consultant Fee Determination

Project Name: Upper Idylwood Creek Rehabilitation  
Project Number: 100372  
Consultant: R. W. Beck

#### NEGOTIATED HOURLY RATES

<b><u>Classification</u></b>	<b><u>Hours</u></b>	<b><u>Rate</u></b>	<b><u>Cost</u></b>
Senior Project Manager	116	\$170	\$19,720
Project Manager		\$155	
Project Engineer		\$136	
Senior Engineer	69	\$109	7,521
Engineer		\$87	
Junior Engineer		\$81	
CAD	20	\$78	1,560
Financial Assistant	20	\$72	1,440
Graphics		\$81	
Project Assistant	22	\$69	1,518
Clerical		\$47	
Subtotal:	247		\$31,759

#### REIMBURSABLES

Mileage and Travel (\$0.405 per mile)	\$928
Reproduction (copies, plots, etc.)	235
Computer services and software use	840
Miscellaneous	100
Subtotal:	\$2,103

#### SUBCONSULTANT COSTS (See Exhibit D)

Taylor Associates, Inc, (fisheries)	\$3,339
Zipper Zeman (Geotechnical)	\$8,449
David Evans and Associates (landscaping and surveying)	6,688
Subtotal:	\$18,476

**TOTAL** \$52,338

**CONTINGENCY** 5,162

**GRAND TOTAL** \$57,500

## NEGOTIATED HOURLY RATE WORKSHEET

Project Name:	Upper Idylwood Creek Rehabilitation
Project Number:	100372
Consultant:	R. W. Beck
Prepared By:	Roetemeyer
Maximum Hourly Rate:	170
Target Average Rate:	129
Multiplier	3.16 From Fee Computation Worksheet

### Negotiated Hourly Rates

Discipline, Title, or Name	Direct Salary Cost (DSC)	Multiplier	Computed Hourly Rate	Negotiated Hourly Rate
Senior Project Manager	54.08	3.16	170.97	\$170
Project Manager	49.15	3.16	155.39	\$155
Project Engineer	42.90	3.16	135.63	\$136
Senior Engineer	34.61	3.16	109.42	\$109
Engineer	27.64	3.16	87.38	\$87
Junior Engineer	25.50	3.16	80.62	\$81
CAD	24.81	3.16	78.44	\$78
Financial Assistant	22.80	3.16	72.08	\$72
Graphics	25.66	3.16	81.12	\$81
Project Assistant	22.00	3.16	69.55	\$69
Clerical	15.00	3.16	47.42	\$47
		3.16		
		3.16		
		3.16		
		3.16		
		3.16		
		3.16		
		3.16		
		3.16		

### Average Hourly Rate Computation

Total Labor Cost	31,759
Total Labor Hours	247
<b>Average Hourly Rate</b>	<b>129</b>

## CONSULTANT FEE COMPUTATION WORKSHEET

Project Name:	Upper Idylwood Creek Rehabilitation
Project Number:	100372
Consultant:	R. W. Beck
Estimated Design Fee:	\$52,398
Prepared By:	Jerallyn Roetemeyer

### Fee Computation

Factor	Rate	Weight	Value
Degree of Risk	0.30	X 25	7.50
Relative Difficulty of Work	0.29	X 25	7.25
Size of Job	0.35	X 20	7.00
Period of Performance	0.25	X 15	3.75
Other Criteria	0.27	X 5	1.35
Subcontracting	0.33	X 10	3.30
<b>Negotiated Fee (% of DSC)</b>		<b>100</b>	<b>30.15 %</b>

Note: See Instructions for factor descriptions and rate guidelines

### Multiplier Computation

<u>Component</u>	<u>Multiplier</u>
Labor (DSC)	1.00
Overhead (OH)	1.86
Fee	0.30
<b>Total Multiplier (DSC+OH+Fee)</b>	<b>3.16</b>